

Remarks

Claims 10 and 11 have been allowed. Claims 4, 5 and 9 were objected to. Claims 4 and 9 are presented in independent form. Therefore, claims 4, 5 and 9 should be allowed.

Claims 1-3 and 6-8 have been rejected under 35 USC § 103 on the basis of U.S. Patent No. 6,447,075, to Ross et al., in view of U.S. Patent No. 6,505,893 to Schmidt et al. This rejection is respectfully traversed.

The parking brake circuit in the brake system of Ross is highlighted in red on an attached copy of Fig. 1 from the Ross patent. When parking brake valve 13 is opened, pressure is delivered via line 100 and double-check valve 102 to a line 103 and to the spring brake parking sections of actuators 24 and 25 (via line 103) at each end of each of the two rear axles depicted in the schematic representation of Fig. 1. Therefore, all of the parking brakes are applied together. In Ross (see Col. 2, lines 58 and 59) where Ross describes the spring brake parking section of double-diaphragm 10 of actuators 24,25 for the brakes. At Col. 3, beginning at line 1, Ross describes his electronics 21 and its operation in "...deriving suitably proportional service brake pressure from the trailer reservoir 11 to respective service brake chambers 23,24,25 of the respective wheels." (emphasis added) Ross also describes (see Col. 3, lines 10-14) that the ECU 26 includes a main configuration data memory and electronic 21 for specific braking related vehicle parameters which enable it to control the valve assembly 22 to supply braking pressure to the brake actuators appropriate to the loading. Thus, the variation in braking pressure applied to brake actuators in Ross, relates to the service brakes and not to the parking brakes. The parking brakes in Ross are all simultaneously applied.

Thus, Ross et al. teaches the application of parking brakes to wheels at both ends of each axle having parking brakes.

The brake system of Schmidt et al. relates to service brakes and not parking brakes. In Schmidt et al., a sensor determines failure of a brake circuit. The fluid pressure at the at least one wheel brake of the intact brake circuit is controlled in such a way that the gradient of a developing yawing moment of a vehicle provided with a vehicle brake system of Schmidt et al. does not exceed a predetermined maximum value. The increase of the yawing moment of the vehicle which occurs during braking with only one intact brake circuit is slowed down by suitable fluid pressure modulation at the wheel brake(s) of the intact brake circuit and/or said

increase of the yawing moment is prevented from exceeding a value which would lead to a potentially hazardous driving situation. (Col. 1, lines 30-39 of Schmidt et al. and Col. 2, lines 48-54 thereof).

Thus, in these cited Ross et al. and Schmidt et al references, the only disclosure of a parking brake system is one in Ross et al. where parking brakes are present at opposite ends of two axles and all of these parking brakes are applied together.

Thus, any modification of Ross et al. in view of Schmidt et al., would be a modification of the service brake system of Ross et al. and not the parking brakes of Ross et al.

Claim 1 requires “applying a first parking brake to brake at least one wheel attached to a first brake end portion of a first axle at one side of the vehicle without applying parking brake to any wheel at the other end portion of the first axle opposite to said one end portion of the first axle; and applying a second parking brake to brake at least one wheel attached to a second end portion of a second axle at a second side of the vehicle opposite to the first side of the vehicle”.

This is simply not shown or suggested by the cited Ross et al. and Schmidt et al. references.

Claims 2, 3 and 6 depend from claim 1 and should be allowed for the reasons given above in support of their parent claim and because each of these claims sets forth an independently patentable combination of method acts. For example, claim 2 requires a second parking brake to be applied without applying a parking brake to any wheel at the first end portion of the second axle which is opposite to said second end portion of the second axle.

Therefore, these claims should be allowed.

Claim 7 requires the act of only applying the parking brakes of diagonally disposed wheels coupled to a set of tandem axles.

This is not shown or suggested by the cited Ross et al. and Schmidt et al. references.

Claim 8 requires the act of applying a first parking brake to a first wheel of one of the first and second axles and applying a second parking brake to a second wheel of the other of the first and second axles, the second wheel being at the opposite side of the longitudinal axis from the first wheel and that the first and second parking brakes are the only parking brakes that are applied.

These requirements are not shown or suggested by the cited Ross et al. and Schmidt et al. references.

Therefore, the rejection of the claims in the Office Action is respectfully traversed and the application should be allowed.

Request for Interview

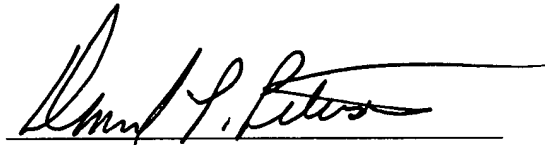
If any issues remain, the Examiner is formally requested to contact the undersigned attorney prior to issuance of the next Office Action in order to arrange a telephonic interview. It is believed that a brief discussion of the merits of the present application may expedite prosecution. Applicants submit the foregoing formal Amendment so that the Examiner may fully evaluate Applicants' position, thereby enabling the interview to be more focused.

This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By



David P. Petersen

Registration No. 28,106

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446